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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/506,434	09/02/2004	Shinya Nagata	5553NA1-1	1269
62574	7590	01/04/2010		
Jason H. Vick Sheridan Ross, PC Suite # 1200 1560 Broadway Denver, CO 80202			EXAMINER BEHRINGER, LUTHER G	
			ART UNIT 3766	PAPER NUMBER
			NOTIFICATION DATE 01/04/2010	DELIVERY MODE ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

jvick@sheridanross.com

## Office Action Summary

**Application No.**

10/506,434

**Applicant(s)**

NAGATA ET AL.

**Examiner**

Luther G. Behringer

**Art Unit**

3766

**Period for Reply** -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 21 September 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1,2,6,8-12 and 14 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,2,6,8-12 and 14 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 04 September 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date 10/02/2009
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

**DETAILED ACTION**

1. This office action is in response to the communication received on 09/21/2009 concerning application no. 10/506434 filed on 09/02/2004.

***Response to Arguments***

2. Applicant's arguments filed 09/21/2009 have been fully considered but they are not persuasive. Applicant argues that Sato fails to demonstrate grouping the leads for chart data generation. To the contrary, 12 lead ECG's are inherently grouped as is evidenced by the nomenclature assigned to each lead (See Tables 4 and 5 of Sato: I, II and III: standard limb leads; AVR, AVL and AVF: augmented limb leads; v1 – v6: horizontal plane leads).

***Claim Rejections - 35 USC § 112***

3. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

4. Claim(s) 1, 2 and 14 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim(s) 1, 2 and 14 recite the limitation "with regard to each group" (emphasis added) in the second paragraph of claim(s) 1 and 2 and in the third paragraph of claim 14. There is insufficient antecedent basis for this limitation in the claim.

***Claim Rejections - 35 USC § 103***

5. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
6. Claim(s) 1, 2, 6, 8 – 12 and 14 are rejected under 35 U.S.C. 103(a) as obvious over the certified English translation of **Sato (JP 6-205751)** (previously cited).

Regarding **claim(s) 1, 2 and 14**, Sato discloses an electrocardiogram (ECG) chart data-generating device for generating chart data to be used to display charts based on measured ECG data [0006, 0010], comprising: means for generating feature value data indicating an ECG feature value with regard to each group where the plural leads of ECG chart data are grouped according to each portion of the heart, *personal computer* [0008]; and means for generating chart data corresponded to each portion of the heart, *personal computer* [0008], wherein the chart data is to be used to display a chart in which the feature value of each group represented by the feature value data is displayed [0044]; and wherein the chart data is displayed in a chart in which each feature value is displayed correlated with the corresponding portion of the heart [0040 – 0043].

7. Sato discloses the claimed invention except for explicitly formatting his data in a chart format. It would have been obvious to one having ordinary skill in the art at the time the invention was made to separate out the raw data prior to formatting it pictorially, since it has been held that constructing a formerly integral structure in various elements involves only routine skill in the art. **Nerwin v. Erlichman**, 168 USPQ 177, 179.

With regard to **claim 6**, Sato discloses means for controlling display, *personal computer* [0019] for varying the display style of the feature value when the feature value is in an abnormal range [0030, 0040 – 0043].

Regarding **claim 9**, Sato discloses wherein the chart data is displayed in a chart that relates the feature value to each portion of the heart including at least left portion of the heart, right portion of the heart, bottom portion of the heart, front portion of the heart, or inner portion of the heart [0043].

With regard to **claim 10**, Sato discloses wherein the feature value data is based on the constituent elements of an ECG including at least P wave, Q wave, R wave, S wave, ST segment, or T wave [0003].

Regarding **claim 11**, Sato fails to disclose wherein the chart data is displayed in the feature value in a radar chart form.

8. It would have been obvious to one having ordinary skill in the art at the time of the invention to modify the display as taught by Sato with a chart in radar chart form as is well known in the art, since such a modification would provide the predictable results of allowing a physician to easily and efficiently view a visual representation of the disease information for each portion of the heart.

With regard to **claim 12**, Sato discloses wherein the chart data is displayed in the feature value on a heart image [0043].

9. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over the certified English translation of **Sato (JP 6-205751, herein Sato)** in view of **Schuelke et al. (US 6,112,119, herein Schuelke)**.

With regard to **claim 8**, Sato fails to disclose wherein the display controlling means or means for displaying the abnormal value is to hold display of the feature value constant even when the feature value varies within a normal range.

However, Schuelke teaches wherein the display controlling means or means for displaying the abnormal value is to hold display of the feature value constant even when the feature value varies within a normal range (Col. 26, ll. 7 – 16).

10. A person of ordinary skill in the art, upon reading the reference, would have recognized the desirability of maintaining a display in a normal range while receiving acceptable deviations to reduce false alarms due to observation of normal deviations of the signal. Thus, it would have been obvious to a person having ordinary skill in the art at the time of the invention to modify Sato to include maintaining a display in a normal range while receiving acceptable deviations as taught by Schuelke, since doing so would reduce distractions observed by a practitioner due to false alarms allowing efficient, effective treatment of a patient.

### ***Conclusion***

11. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Luther G. Behringer whose telephone number is (571)270-3868. The examiner can normally be reached on Mon - Thurs 9:00 - 6:30; 2nd Friday 9:00 - 5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Carl Layno can be reached on (571) 272-4949. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Carl H. Layno/  
Supervisory Patent Examiner, Art Unit 3766

/Luther G Behringer/  
Examiner, Art Unit 3766